identified from the departmental database for comparison. Mobilisation chemotherapy in all patients consisted of Cyclophosphamide 2gm/m^2. Those given conventional subcutaneous GCSF (Group 1) started 5mcg/kg daily (rounded to vial size) on the day after cyclophosphamide and continued until mobilisation was complete. Those given subcutaneous Pegylated G-CSF (Group 2) were given a single 6mcg dose 24 hours post chemotherapy. Harvest was deemed successful if the CD34 cell count in product was $> 2.0 \times 10^6$/kg. Data collected included product CD34 count, peripheral blood white cell count, CD34 count and CD34%, time (days) until harvest, number of apheresis, and the number of conventional GCSF doses administered.

Results: Forty four patients (22 in each group) mobilised between 04/08/2008 and 26/04/2011 were identified. 29 were male and 15 were female with a median age of 60 years. There was no difference in mobilisation success (95% in both groups) with a median CD34 count of 4.7 $\times 10^6$/kg in Group 1 and 4.8 $\times 10^6$/kg in Group 2 ($p = 0.9$). The median time to first apheresis procedure was 9 days in each group. Six patients in group 1 required a second day of apheresis, compared with 4 patients in group 2. Patients in group 1 received a median of 8 doses of GCSF compared with one dose in group 2.

Conclusions: Pegylated GCSF gives similar PBSC mobilisation success compared with conventional daily GCSF when used with cyclophosphamide in patients with myeloma.This represents a cost saving with one Pegylated G-CSF 6mg being the cost equivilent to 5 doses of conventional G-CSF.

494

A CENTER SPECIFIC GUIDE SUCCESSFULLY INFORMS PATIENTS ABOUT ALLOGENEIC STEM CELL TRANSPLANTATION

Schroeder, L.G.[1], del Cerro, P.[1], Thomas, R.[1], Malloy, R.[1], Artz, A.[1], Van Besien, K.[2] [1] University of Chicago Medical Center, Chicago, IL; [2] Weill Cornell Medical College, New York, NY

Allogeneic hematopoietic cell transplantation (HCT) is a complex treatment which can be both life-saving and life-threatening. Excellent general resources exist to educate patients such as the National Marrow Donor Program (NMDP) and the Bone Marrow Transplant Infonet. However, we found that patients and their families coming to transplant continued to have fears and uncertainties about specific transplant details and logistics not addressed.

We developed the "Allogeneic Stem Cell Transplant Patient Guide" in 2009 with input across transplant team members and provided the booklet to all allogeneic transplant recipients. The booklet contains both general information as well as center specific information on the domains: stem cell transplantation overview, identifying a donor, participation in research studies, preparing for hospitalization, conditioning, preparing for the recovery phase and discharge, GVHD, infections, immunosuppressant and antimicrobial medications, long-term effects after transplant, and further resources for information and support.

To evaluate the utility of the Patient Guide, we prepared a survey instrument with responses rated from 1 to 5, where 1 was low and 5 was high. We sent surveys to 60 patients who were transplanted between April 2010 and September 2011. Of these 60 patients, 4 were too ill to complete the survey. Twenty eight (50% response rate) surveys were returned. Most patients had some knowledge about transplantation but all responders felt their knowledge had positively changed after reading the book. The patients found the guide was useful in preparing them for the transplant process and was clear and easy to understand as depicted in table 1.

Table 1. N = 28

Question related to Patient Guide	Mean	SD
Knowledge before guide	2.29	1.03
Increased knowledge about transplantation after guide	4.18	0.68
Guide useful in preparing for hospitalization	4.13	1.07
Guide useful in preparing for home care after transplant	4.35	0.75
Information easy to understand	4.55	0.57

Our center specific educational guide successfully informed patients about the specific transplant process at our center. In the future, we believe internet based resources will provide better and updated information.

495

RETENTION AND SATISFACTION ON BMT: AN EVIDENCE-BASED PRACTICE PROJECT

Morrison, C.F. Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Background: Registered nurse (RN) turnover represents a significant cost to the institution, as well as a burden to the remaining staff in training and replacing the RN. Bone marrow transplant (BMT) staff are constantly engaged in providing a therapeutic presence to support families and meet their needs throughout the transplant process. This process is intense and complex medically, emotionally, socially and spiritually for the families and the staff that care for them. Work-related stress on the BMT unit impacts nurse retention, job satisfaction, and quality of care.

Clinical Question: Among pediatric registered nurses in high acuity inpatient setting does having a staff psycho-social support program versus no support program, increase staff satisfaction? Increased staff satisfaction defined: decreased burnout, increased morale, increased retention, decreased turnover. Larrabee's (2009) Model of Evidence-Based Practice Change was used to guide this evidence-based practice project.

Evidence Appraisal: Search terms: job satisfaction, compassion fatigue, critical care, nursing, reflective supervision, secondary traumatization, support program, mentorship, burnout, Bone Marrow Transplant. Databases: MEDLINE, CINAHL, PsycINFO, and Cochrane. Search limits: articles printed in English. Questions sent to Listservs with little response.

Synthesis of Evidence: One expert opinion and two descriptive were applicable to the clinical question. Two of these studies describe a program and found the staff had low burnout and high job satisfaction (Sarantos, 1988 [5a], Molassiotis & Haberman, 1996 [4a]). The overall grade of the evidence was low. Three interventions in the literature could be incorporated into a support program: mentoring, grief support, and education on coping (Aycock & Boyle, 2009 [4a]).

Recommendations: There is insufficient evidence and lack of consensus in the literature. Recommend further research.

Implementation/Evaluation: A qualitative study using Madeleine Leininger's Theory of Culture Care and Universality will be implemented on BMT pending IRB approval. Focus groups of RNs, medical team, families, and support staff will be conducted. Transcripts will be analyzed for themes and an intervention will be designed to address the themes that emerge from the research. Internal data is also being collected on staff satisfaction and turnover.

CLINICAL

311

PROMOTING PATIENT SELF-CARE ACROSS THE CONTINUUM

Elchook, A.M. Duke University Hospital, Durham, NC

In the Adult Bone Marrow transplant setting, patients are given a great volume of information regarding the transplant process, medications, and basic care needs that are essential to their successful transplant. As learning needs change for patients it is critical to understand which education points need to be highlighted more frequently. We implemented a behavior reinforcement tool on the inpatient transplant unit designed to put the patient in charge of their daily care needs such as mouth care, exercise, nutrition, etc. By instituting this tool on the inpatient unit, we hope patients will start to realize the importance of continuing these daily self-care needs in the outpatient setting when they are under less supervision by a formal caregiving staff, have more autonomy, and more supervision by informal caregivers. We also implemented an 'additional focus for today' section to write what needs to be re-educated based on the individual patient. The sheets are displayed on each patient's bulletin

boards and are reminded every morning to complete them throughout the day. Each day, the oncoming nurse will have an idea about how the patient is completing their self-care and what areas of daily activities need to be educated and enforced. Currently, we are collaborating with physical therapy and occupational therapy to become a more unified team in encouraging patients to practice good self-care activities. The goal is to assess the effects of this tool on self-care compliance. We hope that by increasing self-care compliance we are able to discharge patients to the outpatient clinic well nourished, less debilitated and better able to manage their own care in the outpatient setting.

496

PRIMARY NURSING MODEL AND BONE MARROW TRANSPLANT

Morrison, C., Kiniyalocts, S., Lewyckyj, M., McEnroe, A., Nixon, D., Thomas, N., Shelton, C., Borich, A. Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Practice Problem: Bone marrow transplant patients have very complex medical and social needs with an extended length of stay. In order to address needs for continuity and current plans of care, primary nursing is being implemented. An evidence-based practice (EBP) project was completed.
Purpose/ PICOT question: Among bone marrow transplant patients, does initiating primary nursing teams prior to admission impact patient and caregiver satisfaction and staff satisfaction? A primary nurse was defined as not necessarily providing all of the direct patient care, but the point person identifying the patient's unique health needs and priorities, establishing an individualized plan of care, and communicates that plan to other members of the health care team.
Summary of Literature: Databases searched: Ovid Medline, Cochrane, & CINHAL. A hand search was completed and questions were sent to pediatric institutions. 60 articles were identified, 6 were relevant, appraised, and synthesized. Primary nursing improves patient safety, retention, staff and family satisfaction, the quality of patient care, consistency and cost-effectiveness (Watts & O'Leary, 1980, MacDonald, 1988, Webb & Pontin, 1996, Goode & Rowe, 2001, Jost, Bonnell, Chacko & Parkinson, 2010). It is both a philosophy and an organizational structure (Furlong, 1994).
Model: Ellen Finout-Overholt and Bernadette Melnyk's Advancing Research and Clinical Practice Through Close Collaboration (ARCC) Model was used to facilitate the project (Melnyk & Fineout-Overholt, 2011).
Outcomes: Baseline staff and family satisfaction surveys were collected prior to implementation and will be collected post implementation. The surveys focus on satisfaction with medical care, nursing care, and meeting communication needs.
Implications for Practice: Primary nursing provides a structure to collaborate and individualize plans of care. It gives the family a group of nurses with which to communicate and provide consistency. This team atmosphere also allows for breaks and improved professional nursing practice.

497

BLOOD SPARING PROTOCOL FOR BLOOD DRAWS VIA A CENTRAL ACCESS DEVICE

Morrison, C., Collins, S., Kent, D., Webage, S., Sandfoss, E., McElhiney, A., Sparks, A., Hayward, M. Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Practice Problem and Purpose: Oncology and hematopoietic stem cell transplant (HSCT) patients receive chemotherapy or have disease processes that effect erythropoiesis. Each transfusion exposes them to risks. Blood sparing protocol involves returning wasted blood during lab draws. It is only implemented on children under 10 kilograms. An Evidence- Based Practice (EBP) project was initiated to consult the literature on implementing blood sparing protocol on all HSCT patients as a method for blood conservation.
PICOT Question: Among hematology/oncology pancytopenic patients does using blood sparing protocol verses standard lab draw impact the need for transfusion and infection risk? Hematopoietic stem cell transplant patients are included in the population. Blood sparing protocol is a closed system that allows for the return of blood waste during lab draws.
Summary of Literature: Databases searched: Ovid Medline, CINAHL, and Cochrane. A hand search was conducted and questions were sent to NACHRI and APHON. 19 articles were found, 5 support waste return for blood conservation, none directly answered the PICOT question. Waste return in combination with other blood conservation techniques reduces blood loss and need for transfusion (Fowler & Berenson, 2003, Tinmouth, McIntyre, & Fowler, 2008). A closed system for waste return has less risk for infection (Fowler & Berenson, 2003).
Model/Process: Ellen Finout-Overholt and Bernadette Melnyk's Advancing Research and Clinical Practice Through Close Collaboration (ARCC) Model was used to facilitate the project (Melnyk & Fineout-Overholt, 2011).
Outcomes: The device has minimal cost associated. Baseline internal data suggests that the protocol is not related to blood stream infections (BSI). BSI data and number of transfusions received will be monitored.
Conclusion and Implications: Blood sparing protocol is an effective method of blood conservation and should be implemented on all HSCT patients, and when appropriate in the oncology population, and may reduce the number of blood products transfused.

498

A MULTI-STEP INTERVENTION TO ENHANCE KNOWLEDGE AND COMPLIANCE WITH PERSONAL PROTECTIVE EQUIPMENT

Munaretto, M., Peterson, J., Hein, D., Sanchez, J., Slicklman, F., Afable, M. City of Hope

Background: Chemotherapy is a hazardous medication that requires special handling due to the serious health risk that may occur with exposure. Regulating bodies such as National Institute for Occupational Safety and Health (NIOSH), Occupational Safety and Health Administration (OSHA) and The Joint Commission (TJC), emphasize the need for safe practice for healthcare workers administering potentially hazardous medications.
Purpose: On a 36 bed hematology unit at a NCI-designated medical center, the unit based council (UBC) noted inconsistencies among nursing staff in the usage of Personal Protective Equipment (PPE). Problem areas were wearing the PPE when administering chemotherapy and correct disposal of body fluids contaminated with chemotherapy. One reason for the inconsistency was the inconvenient accessibility of the PPE which was located in a separate room and required additional steps for the nurse administering the chemotherapy agents. Another factor was lack of communication to the nursing assistants. It seemed that they were unaware of PPE precautions when performing patient care. The last factor was the need for nurse education to don PPE when administering oral chemotherapy.
Intervention: The unit based council, in conjunction with staff that had attended an Evidenced Based Nursing (EBN) Seminar created a survey to evaluate knowledge of the nursing and ancillary staff on the unit for chemotherapy and its precautions. Results revealed a consistent lack of use of PPE for administering and disposing of chemotherapy which stemmed from lack of knowledge regarding state regulations and hospital policy, and communication between staff. Based on those results, the EBN group strategized a multi step intervention to improve compliance with policy and state mandates. Supplies were relocated; PAR levels increased; chemotherapy disposal bin sizes were changed; signage was placed in visible areas reminding staff of the importance of PPE; and education was presented.
Evaluation: Audits were performed to assess for compliance and adherence to hospital policy. A post intervention survey was given to the staff to assess for increased knowledge. Results revealed an increase in both communication and knowledge regarding PPE.
Discussion: A multi-step educational intervention has shown to enhance knowledge and compliance with regulations and hospital policy for the hematology unit. Staff continue to audit for adherence and perform one on one education as needed.